

**Notice of Allowability**

Application No.

10/721,258

Examiner

John Kim

Applicant(s)

CRAWFORD ET AL.

Art Unit

1723

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 1/9/07.
2. ☒ The allowed claim(s) is/are 1, 2, 4, 8-10, 13, 16-23, 25, 30-34 renumbered 1, 2, 3, 4-6, 7, 8-15, 16, 17-21.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |  |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application                      |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                    |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|  | 9. <input type="checkbox"/> Other _____.   |

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1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Timothy Bogel on 3/13/07.

The application has been amended as follows:

-Claim 1 has been replaced as follows:

- 1. (Currently Amended) A filter assembly comprising:
  - a filter element having first and second ends;
  - a filter housing containing said filter ~~filter~~-element;
  - an end plate secured to a first end of said filter housing, wherein said end plate defines at least one fluid inlet adjacent to said first end of said filter element, and at least one fluid outlet; and
  - a directional fluid insert attached to said first end of said filter element by a snap-fit coupling and disposed between said first end of said filter element and said end plate, wherein the directional fluid insert includes
    - a base ring having at least one fluid-directing fin radially-extending from an outer circumferential surface of said base ring, and
    - said snap-fit coupling defined by one or more flexible mounting tabs that axially extend from said at least one fluid-directing fin. --.

-Claims 3 and 5-6 have been canceled.

-Claim 22 has been replaced with the following on next page:

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- 22. (Currently Amended) A filter assembly; comprising:
- a filter element having first and second ends;
  - a filter housing containing said ~~filter~~ filter-element;
  - an end plate secured to a first end of said filter housing, wherein said end plate defines at least one fluid inlet adjacent to said first end of said filter element; and at least one fluid outlet; and
  - a directional fluid insert attached to said first end of said filter element by a snap-fit coupling and disposed between said first end of said filter element and said end plate, wherein the directional fluid insert includes
    - a base ring having at least one fluid-directing fin disposed on an outer circumferential surface of said base ring, ~~and~~
    - an outer ring integrally-connected to said base ring, and
    - said snap-fit coupling defined by one or more flexible mounting tabs formed integrally with and axially extending away from said outer ring. --.

-Claims 24 and 26-29 have been canceled.

2. The following is an examiner's statement of reasons for allowance:

None of the prior art teaches or suggests the filter assembly of claim 1 having a directional fluid insert attached to the first end of the filter element by a snap fit coupling and disposed between the first end of the filter element and the end plate wherein a directional fluid insert includes a base ring having at least one fluid-directing fin radially extending from an outer circumferential surface of the base ring and the snap-fit coupling defined by one or more flexible mounting tabs that axially extend from the at least one fluid-directing fin and the filter assembly of claim 16 having a directional fluid insert having a substantially annular base ring formed integrally with a plurality of fins extending substantially radially from the base ring, each of the fins of the directional fluid insert having a substantially curved fluid deflecting surface wherein

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the directional fluid insert is attached to the first end of the filter element by a snap fit coupling including a plurality of flexible mounting tabs formed integrally with and axially extending from the fins and the filter assembly of claim 17 including a directional fluid insert having a substantially annular base ring formed integrally with a plurality of fins extending substantially radially from the base ring and a substantially annular outer ring substantially concentric to the base ring and connected thereto by a plurality of substantially radial ridges, each of the fins of the directional fluid insert having a substantially flat fluid deflecting surface canted at an angle with respect to a central axis of the filter assembly wherein the directional fluid insert is attached to the first end of the filter element by a snap fit coupling including a plurality of flexible mounting tabs formed integrally with and axially extending from the outer ring and the filter assembly of claim 22 including a directional fluid insert attached to the first end of the filter element by a snap fit coupling and disposed between the first end of the filter element and the end plate wherein the directional fluid insert includes a base ring having at least one fluid-directing fin disposed on an outer circumferential surface of the base ring and an outer ring integrally connected to the base ring including one or more flexible mounting tabs formed integrally with and axially extending away from the outer ring. Claims 2, 4, 8-10 and 13 depend on allowable claim 1. Claims 18-19 depend on allowable claim 16. Claims 20-21 depend on allowable claim 17. Claims 23, 25 and 30-34 depend on allowable claim 22.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Kim whose telephone number is 571-272-1142. The examiner can normally be reached on Monday-Friday 7 a.m. - 3:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



**John Kim**  
**Primary Examiner**  
**Art Unit 1723**

JK  
3/13/07